

ABSTRACT OF THE INVENTION

The present invention provides a method for modeling the performance of a system comprising computer software operating on computer hardware. In accordance with the present invention, system performance is modeled by fitting non-linear curves to data points for system performance parameters, such as response time and throughput, as a function of load. Data points may be measured in testing may be measured through monitoring a system operating in a production environment. While a variety of non-linear curves may be used in accordance with the present invention, a logarithmic curve may be used to model system throughput and an exponential curve may be used to model system response time. By defining a relationship between throughput and response time a distance may be calculated between the curves, and this distance may be used to determine an optimal load. Additionally, a graph displaying both throughput and response time as a function of load may be displayed to a system operator in a graphical user interface to facilitate the evaluation of system performance.